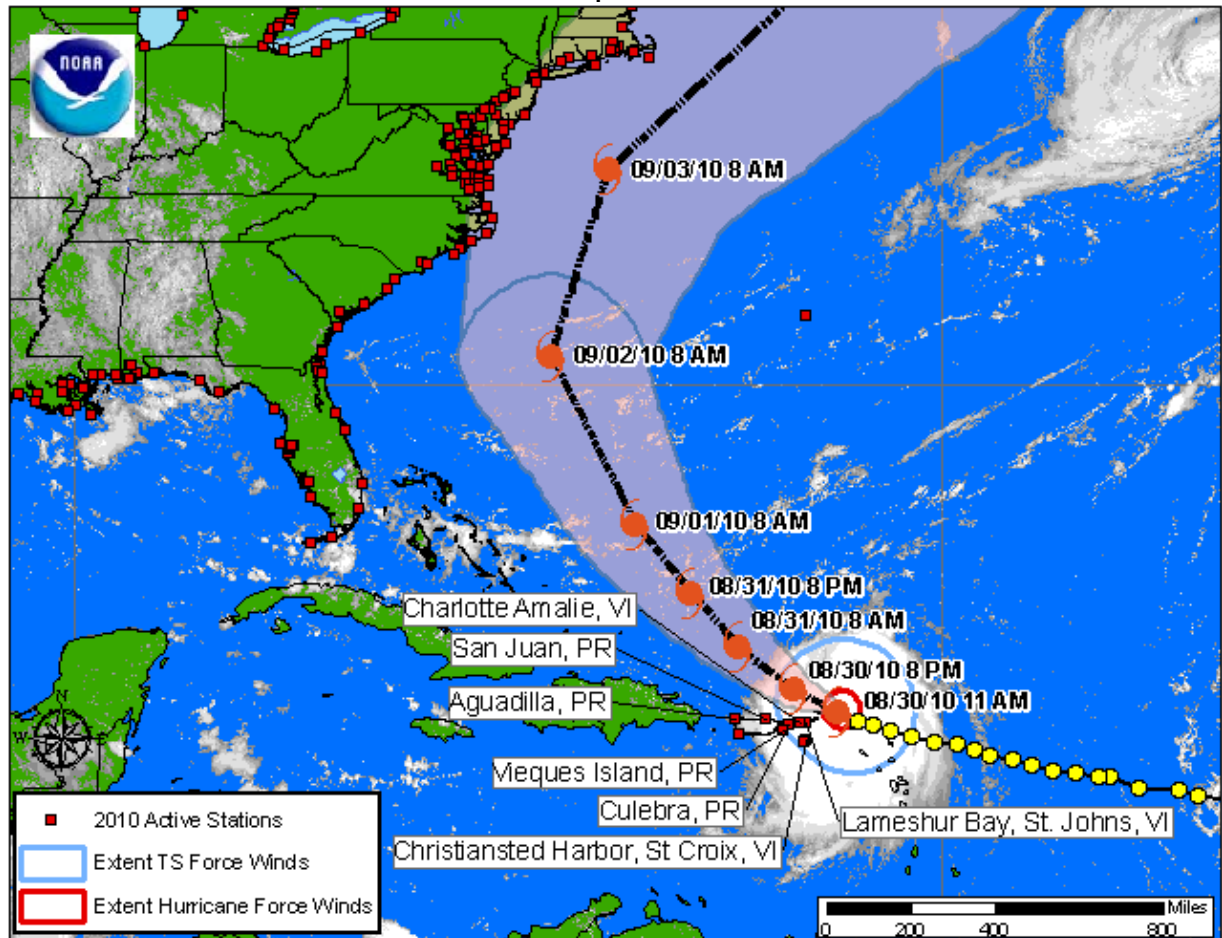




Hurricane EARL QuickLook
Posted: 12:00 AST 08/30/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/30/2010 12:00 AST, water levels across the U.S. Virgin Islands and Puerto Rico are rising and range between 0.4 and 1.2 feet above predictions with the highest elevations seen at Christiansted Harbor, St. Croix, VI.

Wind speeds have been steadily increasing and generally range between 10 and 20 kts with some gusts of 40-50 kts reported across the U.S. Virgin Islands. Barometric pressures continue to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Christiansted Harbor, St. Croix, VI: Next predicted high tides are 0.62 ft (0.19 m) at 08/30/2010 13:18 AST and 0.66 ft (0.20 m) at 08/31/2010 14:53 AST.

Lameshur Bay, St. John, VI Next predicted high tides are 0.72 ft (0.22 m) at 08/30/2010 14:24 AST and 0.78 ft (0.24 m) at 08/31/2010 15:37 AST.

Charlotte Amalie, VI: Next predicted high tides are 0.82 ft (0.25 m) at 08/30/2010 14:50 AST and 0.88 ft (0.27 m) at 08/31/2010 16:12 AST.

Culebra, PR: Next predicted high tides are 0.94 ft (0.29 m) at 08/30/2010 14:03 AST and 0.66 ft (0.20 m) at 08/31/2010 00:51 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.55 ft (0.17 m) at 08/30/2010 13:33 AST and 0.63 ft (0.19 m) at 08/31/2010 17:31 AST.

San Juan, PR Next predicted high tides are 1.58 ft (0.48 m) at 08/30/2010 14:00 AST and 1.10 ft (0.34 m) at 08/31/2010 01:00 AST.

Aguadilla, PR Next predicted high tides are 1.31 ft (0.40 m) at 08/30/2010 12:58 AST and 0.92 ft (0.28 m) at 08/31/2010 00:50 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:PFF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 21

1100 AM AST MON AUG 30 2010

...EARL BECOMES A MAJOR HURRICANE...

WATCHES AND WARNINGS

A HURRICANE WARNING IS IN EFFECT FOR...

*** U.S. VIRGIN ISLANDS**

*** PUERTO RICAN ISLANDS OF CULEBRA AND VIEQUES**

A HURRICANE WATCH IS IN EFFECT FOR...

*** PUERTO RICO**

HURRICANE CONDITIONS ARE EXPECTED WITHIN THE HURRICANE WARNING AREA...IN THIS CASE WITHIN THE NEXT 12 HOURS. PREPARATIONS TO PROTECT LIFE AND

PROPERTY SHOULD HAVE ALREADY BEEN COMPLETED.

HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...IN THIS CASE WITHIN THE NEXT 12 HOURS OR SO.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...GENERALLY WITHIN 48 HOURS.

FOR STORM INFORMATION SPECIFIC TO PUERTO RICO AND THE U.S. VIRGIN ISLANDS...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY THE SAN JUAN NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM AST THE CENTER OF HURRICANE EARL WAS LOCATED ABOUT 95 MI ENE OF ST. THOMAS AND ABOUT 165 MI E OF SAN JUAN PUERTO RICO. EARL IS MOVING TOWARD THE WEST-NORTHWEST NEAR 15 MPH. THIS GENERAL MOTION IS EXPECTED TODAY AND TONIGHT...FOLLOWED BY A TURN TOWARD THE NORTHWEST ON TUESDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR OR OVER THE NORTHERNMOST VIRGIN ISLANDS THIS AFTERNOON AND THIS EVENING.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 120 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY THREE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. ADDITIONAL STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 60 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 185 MILES.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 960 MB...28.35 INCHES.

HAZARDS AFFECTING LAND

WIND...HURRICANE CONDITIONS WILL BE SPREADING ACROSS THE NORTHERN VIRGIN ISLANDS DURING THE NEXT FEW HOURS. TROPICAL STORM CONDITIONS WILL SPREAD OVER PORTIONS OF PUERTO RICO THIS AFTERNOON...WITH HURRICANE CONDITIONS POSSIBLE THIS EVENING AND TONIGHT. STRONGER WINDS...ESPECIALLY IN GUSTS...ARE LIKELY OVER ELEVATED TERRAIN IN PUERTO RICO.

STORM SURGE...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE GROUND LEVEL PRIMARILY NEAR THE COAST IN AREAS OF ONSHORE WIND WITHIN THE HURRICANE WARNING AREA...AND 1 TO 3 FEET IN THE TROPICAL STORM WARNING AREA. THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS BATTERING WAVES.

RAINFALL...EARL IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 4 TO 8 INCHES OVER THE LEEWARD ISLANDS...THE VIRGIN ISLANDS AND PUERTO

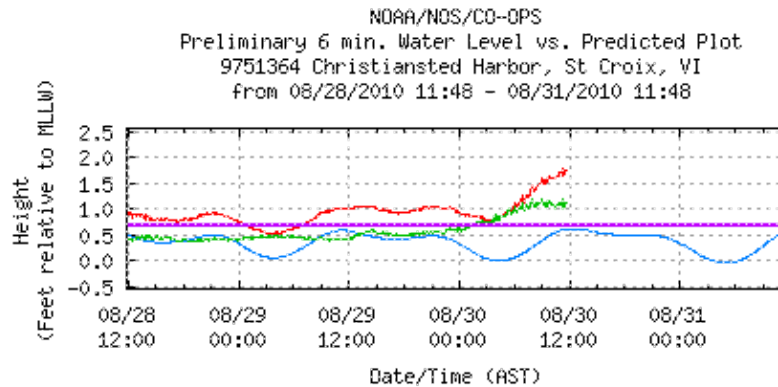
RICO...WITH POSSIBLE ISOLATED MAXIMUM AMOUNTS OF 12 INCHES... ESPECIALLY OVER HIGHER ELEVATIONS. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES.

FORECASTER BROWN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#), [Christiansted Harbor, St Croix - Barometric](#), [Christiansted Harbor, St Croix - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Winds](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [San Juan - Air/Water Temp](#), [Aguadilla - Water Level](#), [Aguadilla - Barometric](#), [Aguadilla - Air/Water Temp](#),

Christiansted Harbor, St Croix, VI - [Return to List](#)



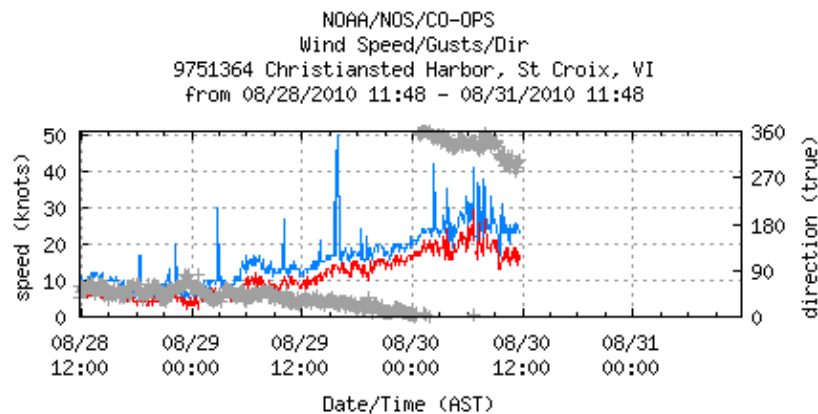
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/30/2010 11:36 (AST)

Relative to **MLLW**: **Observed: 1.75 ft.** **Predicted: 0.61 ft.** **Residual: 1.14 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.73 ft. above **MHHW**

Christiansted Harbor, St Croix, VI - [Return to List](#)

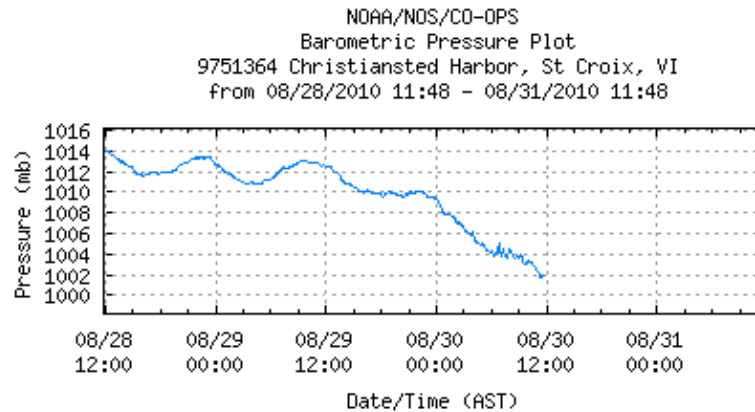


speed — gusts — direction +

Last Observed Sample: 08/30/2010 11:36 (AST)

Wind Speed: 16 knots **Gusts: 23 knots** Direction: 305° T

Christiansted Harbor, St Croix, VI - [Return to List](#)

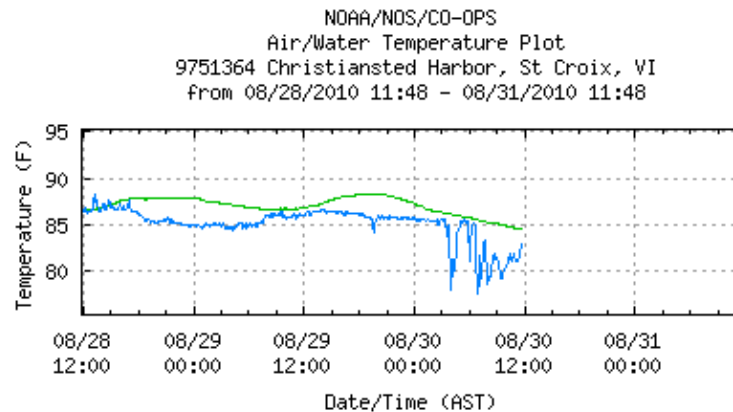


barometric pressure —

Last Observed Sample: 08/30/2010 11:36 (AST)

Barometric Pressure: 1001.9 mb

Christiansted Harbor, St Croix, VI - [Return to List](#)

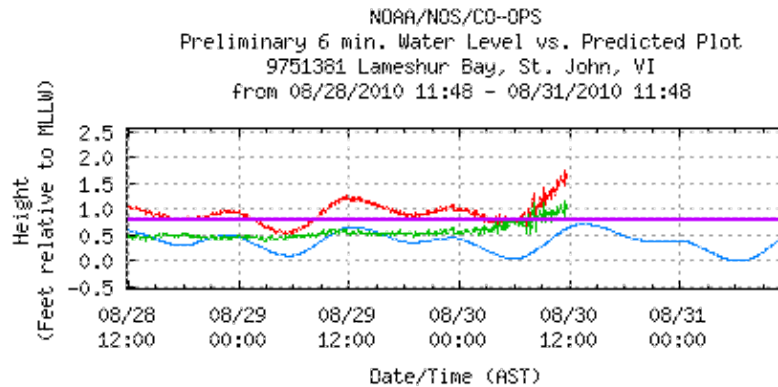


water temp. — air temp —

Last Observed Sample: 08/30/2010 11:36 (AST)

Water Temperature: 84.6° F Air Temperature: 82.9° F

Lameshur Bay, St. John, VI - [Return to List](#)

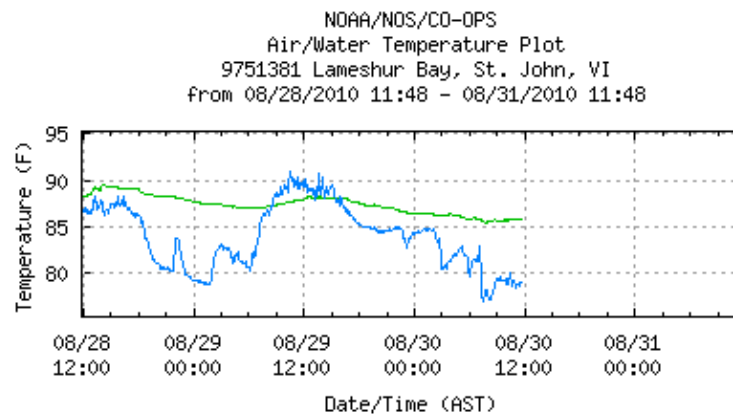


Last Observed Sample: 08/30/2010 11:36 (AST)

Relative to **MLLW**: **Observed: 1.62 ft.** **Predicted: 0.62 ft.** **Residual: 1.00 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.83 ft. above **MHHW**

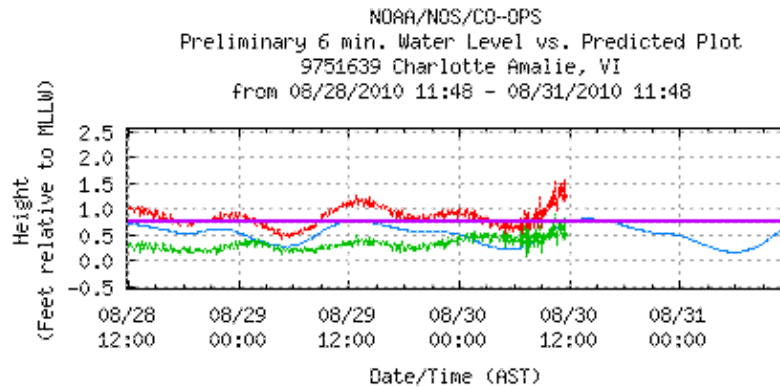
Lameshur Bay, St. John, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 11:36 (AST)

Water Temperature: 85.8° F **Air Temperature: 79.0° F**

Charlotte Amalie, VI - [Return to List](#)

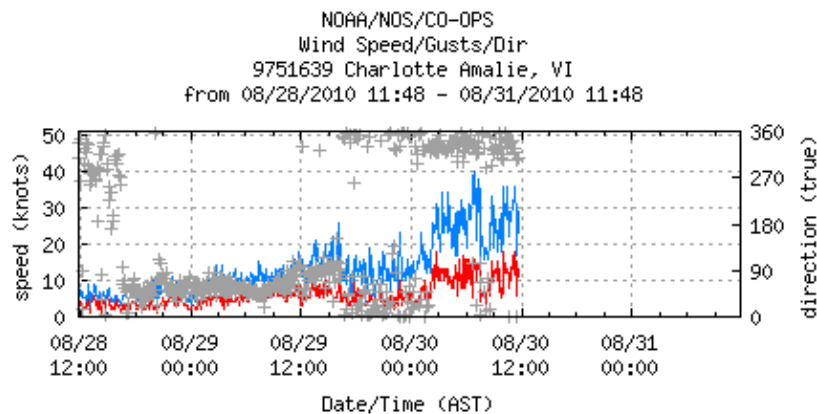


Last Observed Sample: 08/30/2010 11:36 (AST)

Relative to **MLLW**: **Observed: 1.27 ft.** **Predicted: 0.74 ft.** **Residual: 0.53 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above **MHHW**

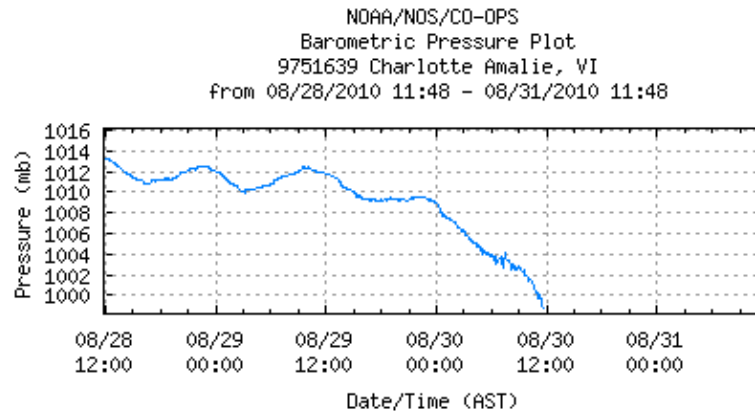
Charlotte Amalie, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 11:36 (AST)

Wind Speed: 11 knots **Gusts: 29 knots** **Direction: 308° T**

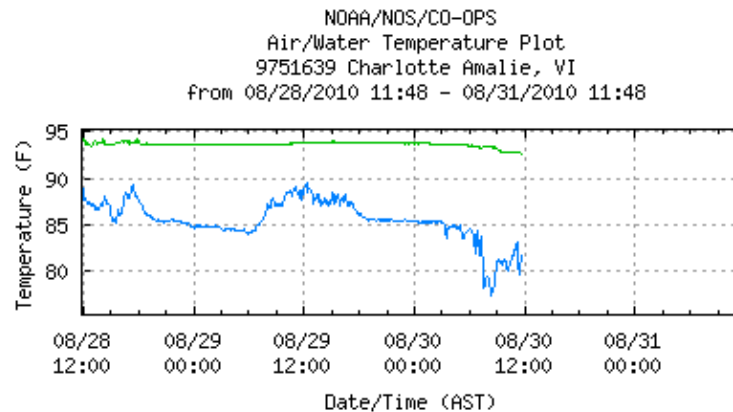
Charlotte Amalie, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 11:36 (AST)

Barometric Pressure: 998.7 mb

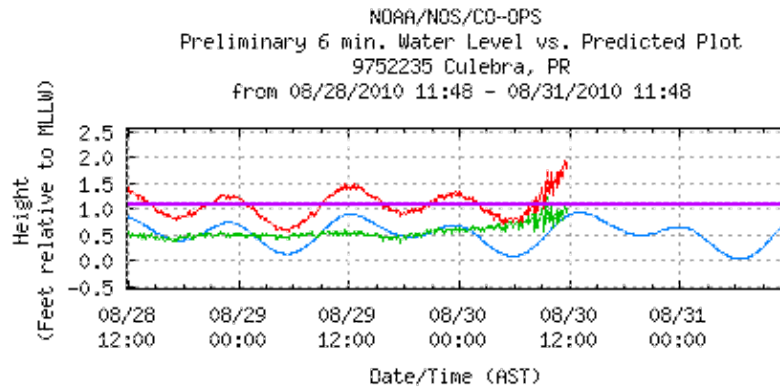
Charlotte Amalie, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 11:36 (AST)

Water Temperature: 92.7° F Air Temperature: 81.6° F

Culebra, PR - [Return to List](#)



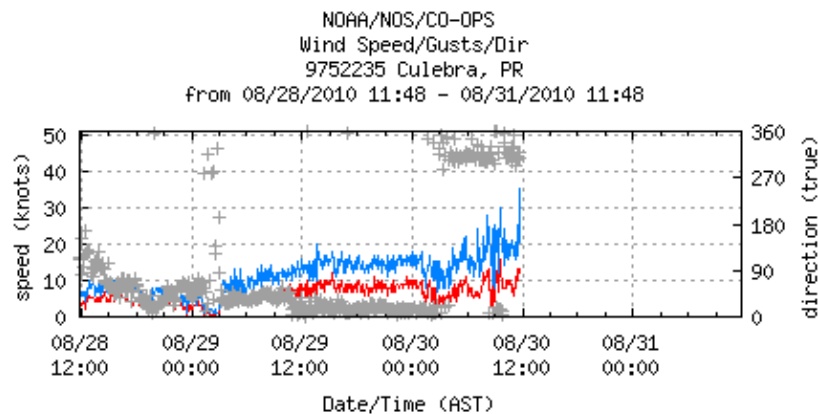
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/30/2010 11:42 (AST)

Relative to **MLLW**: **Observed: 1.80 ft. Predicted: 0.87 ft. Residual: 0.93 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.86 ft. above **MHHW**

Culebra, PR - [Return to List](#)

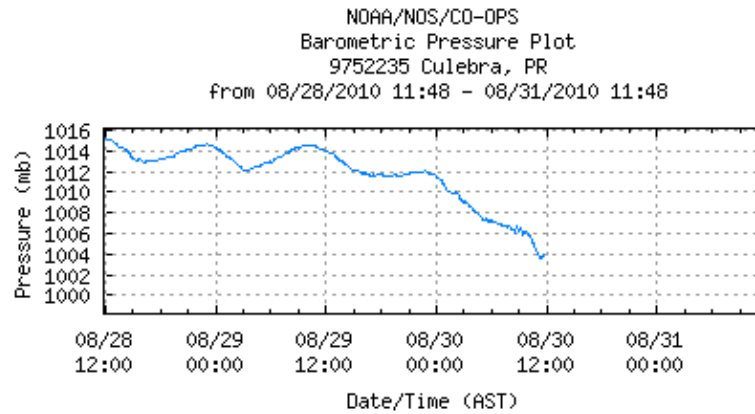


speed — gusts — direction +

Last Observed Sample: 08/30/2010 11:42 (AST)

Wind Speed: 13 knots Gusts: 35 knots Direction: 309° T

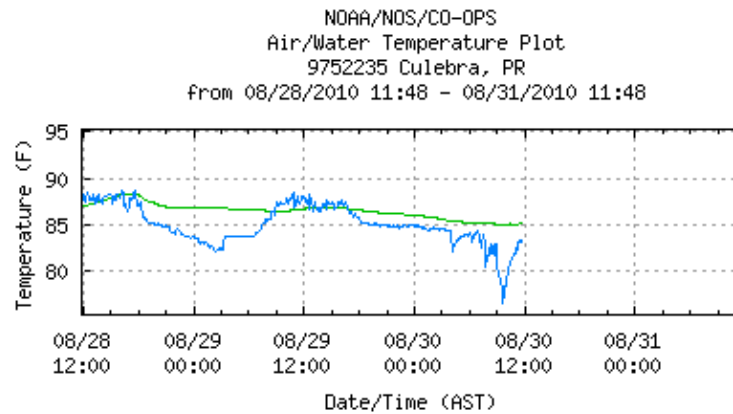
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Barometric Pressure: 1003.7 mb

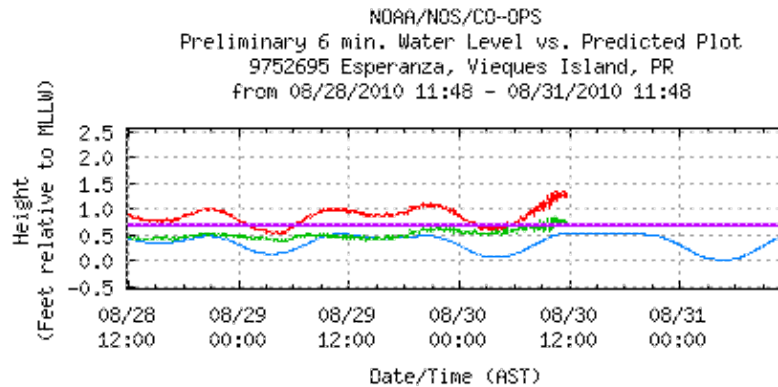
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Water Temperature: 85.1° F Air Temperature: 83.3° F

Esperanza, Vieques Island, PR - [Return to List](#)

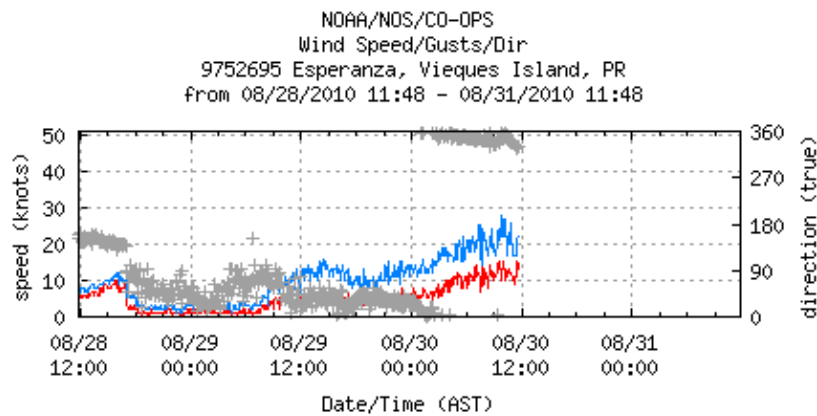


Last Observed Sample: 08/30/2010 11:42 (AST)

Relative to **MLLW**: **Observed: 1.24 ft.** **Predicted: 0.54 ft.** **Residual: 0.70 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.83 ft. above **MHHW**

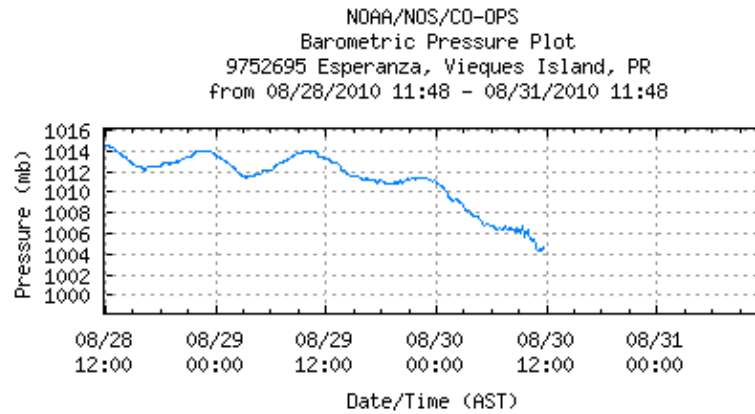
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Wind Speed: 13 knots **Gusts: 22 knots** **Direction: 329° T**

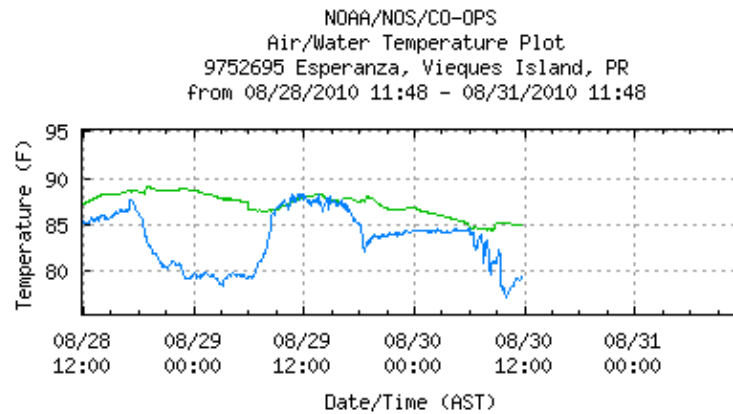
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Barometric Pressure: 1004.7 mb

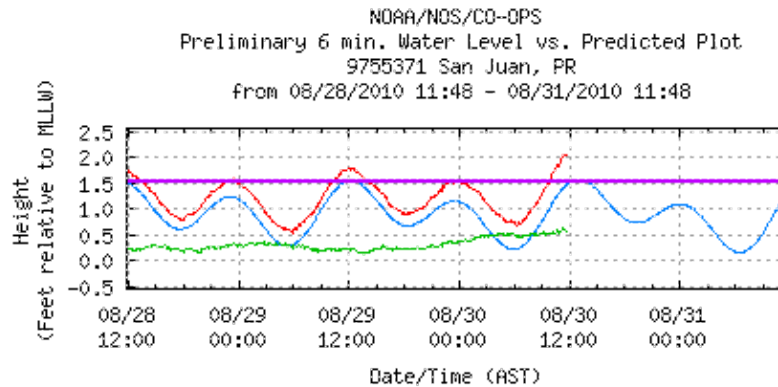
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Water Temperature: 84.9° F Air Temperature: 79.5° F

San Juan, PR - [Return to List](#)

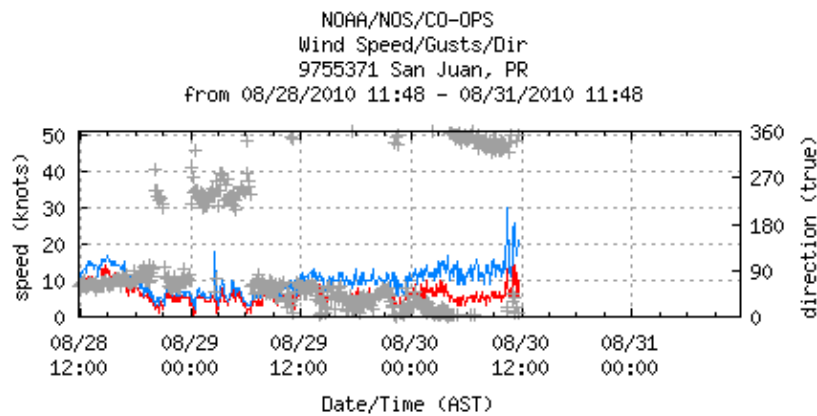


Last Observed Sample: 08/30/2010 11:42 (AST)

Relative to **MLLW**: **Observed: 2.05 ft. Predicted: 1.48 ft. Residual: 0.57 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above **MHHW**

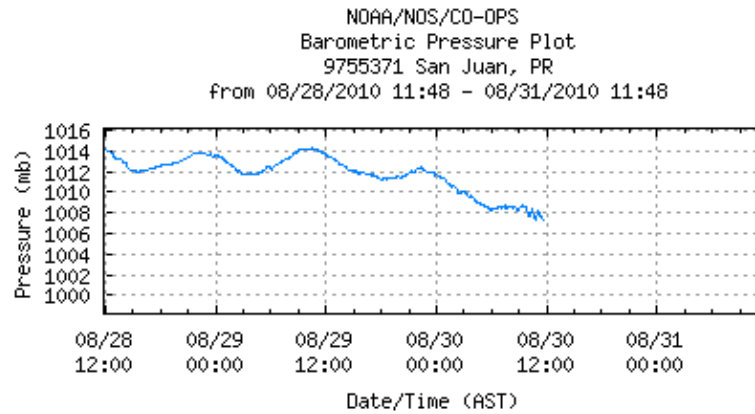
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Wind Speed: 6 knots Gusts: 20 knots Direction: 353° T

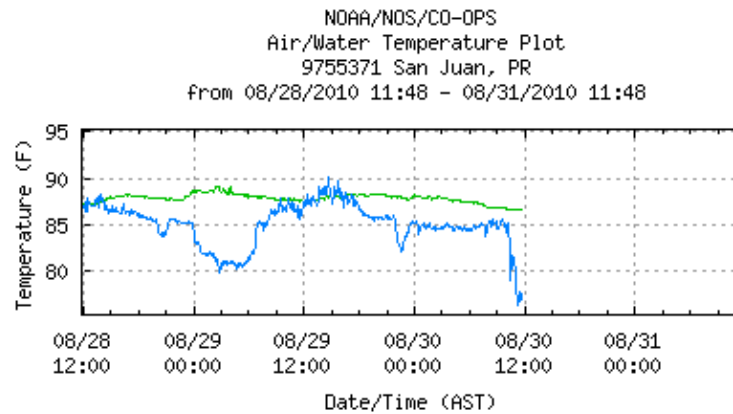
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Barometric Pressure: 1007.2 mb

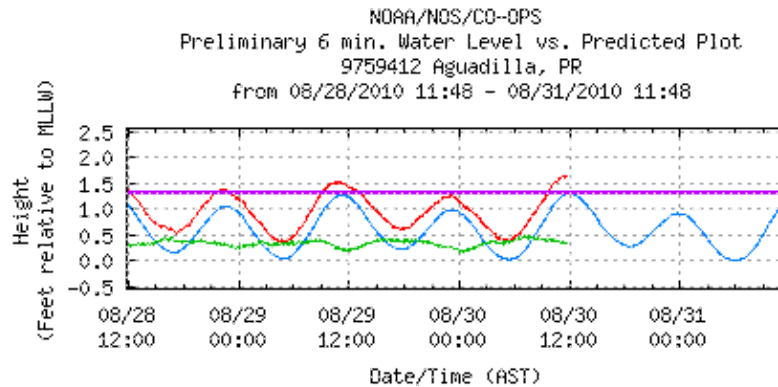
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 11:42 (AST)

Water Temperature: 86.7° F Air Temperature: 77.0° F

Aguadilla, PR - [Return to List](#)

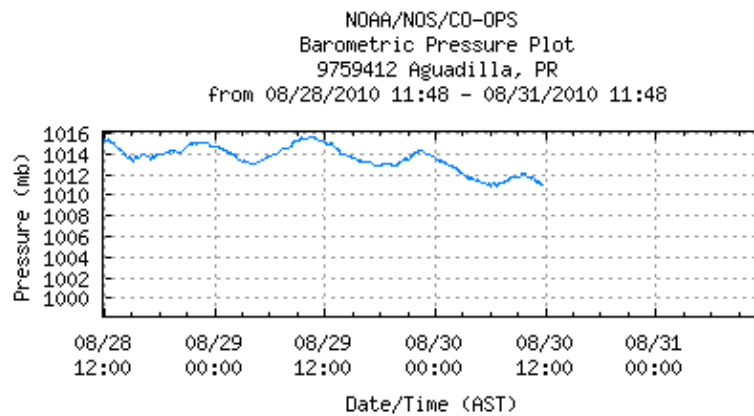


Last Observed Sample: 08/30/2010 11:36 (AST)

Relative to **MLLW**: **Observed: 1.64 ft. Predicted: 1.30 ft. Residual: 0.34 ft.**

Historical Maximum Water Level: Oct 28 2007, 0.95 ft. above **MHHW**

Aguadilla, PR - [Return to List](#)

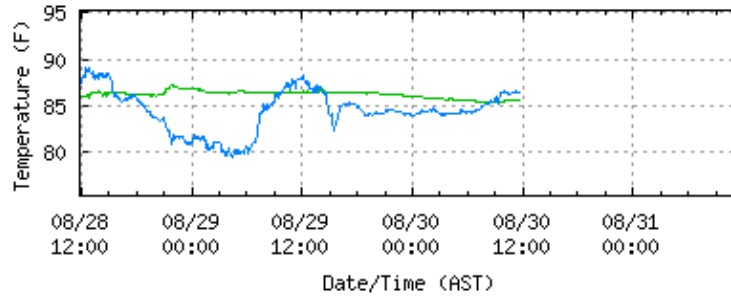


Last Observed Sample: 08/30/2010 11:36 (AST)

Barometric Pressure: 1011.0 mb

Aguadilla, PR - [Return to List](#)

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
9759412 Aguadilla, PR
from 08/28/2010 11:48 - 08/31/2010 11:48



water temp. — air temp —

Last Observed Sample: 08/30/2010 11:36 (AST)

Water Temperature: 85.6° F Air Temperature: 86.4° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce